TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 32 COAL BURNING EQUIPMENT - NITROGEN DIOXIDE

20.2.32.1 ISSUING AGENCY: Environmental Improvement Board.
[11/30/95; 20.2.32.1 NMAC - Rn, 20 NMAC 2.32.100 10/31/02]

20.2.32.2 SCOPE: All geographic areas within the jurisdiction of the Environmental Improvement Board.
[11/30/95; 20.2.32.2 NMAC - Rn, 20 NMAC 2.32.101 10/31/02]

20.2.32.3 STATUTORY AUTHORITY: Environmental Improvement Act, NMSA 1978, section 74-1-8(A)(4) and (7), and Air Quality Control Act, NMSA 1978, sections 74-2-1 et seq., including specifically, section 74-2-5(A), (B) and (C).
[11/30/95; 20.2.32.3 NMAC - Rn, 20 NMAC 2.32.102 10/31/02]

20.2.32.4 DURATION: Permanent.
[11/30/95; 20.2.32.4 NMAC - Rn, 20 NMAC 2.32.103 10/31/02]

20.2.32.5 EFFECTIVE DATE: November 30, 1995.
[11/30/95; 20.2.32.5 NMAC - Rn, 20 NMAC 2.32.104 10/31/02]
[The latest effective date of any section in this Part is 10/31/02.]

20.2.32.6 OBJECTIVE: The objective of this Part is to establish nitrogen dioxide emission standards for coal burning equipment.
[11/30/95; 20.2.32.6 NMAC - Rn, 20 NMAC 2.32.105 10/31/02]

20.2.32.7 DEFINITIONS: In addition to the terms defined in 20.2.32 NMAC (Definitions), as used in this Part:

A. **"Commenced"** means that an owner or operator has undertaken a continuous program of construction or that an owner or operator has entered into a binding agreement or contractural obligation to undertake and complete, within a reasonable time, a continuous program of construction.

B. **"Construction"** means fabrication, erection, or installation of an affected facility.

C. **"Daily average"** means the arithmetic average of the hourly values measured in a 24-hour period from midnight to midnight.

D. **"Existing coal burning equipment"** means coal burning equipment that was fully constructed and operational or under construction prior to August 17, 1971.

E. **"Heat input"** means heat derived from combustion of fuel in a steam generating unit and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

F. **"Malfunction"** means any sudden and unavoidable failure of air pollution control equipment, process equipment, or process to operate in an expected manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or other preventable equipment breakdown shall not be considered a malfunction..

G. **"New coal burning equipment"** means coal burning equipment the construction of which commenced after August 17, 1971.

H. **"Part"** means an air quality control regulation under Title 20, Chapter 2 of the New Mexico Administrative Code, unless otherwise noted; as adopted or amended by the Board.

I. **"Shutdown"** means the cessation of operation of any air pollution control equipment, process equipment, or process for any purpose, except routine phasing out of process units.

J. **"Startup"** means the setting into operation of any air pollution control equipment, process equipment, or process for any purpose, except routine phasing in of process units.

K. **"Station"** means all coal burning equipment at one location.

L. **"Vintage A"** means coal burning equipment that was fully constructed and operational prior to December 31, 1963.

M. **"Vintage B"** means coal burning equipment that was fully constructed and became operational in the period from December 31, 1963, to December 31, 1964.

N. **"Vintage C"** means coal burning equipment that was fully constructed and became operational in the period from January 1, 1965 to August 17, 1971.

O. **"Vintage D"** means coal burning equipment the construction of which commenced prior to, and which became operational after August 17, 1971.

[11/30/95; 20.2.32.7 NMAC - Rn, 20 NMAC 2.32.107 10/31/02]

20.2.32.8 AMENDMENT AND SUPERSESSION OF PRIOR REGULATIONS: This Part amends and supersedes Air Quality Control Regulation ("AQCR") 603 -- Coal Burning Equipment -- Nitrogen Dioxide last filed on July 9, 1991.

A. All references to AQCR 603 in any other rule shall be construed as a reference to this Part.

B. The amendment and supersession of AQCR 603 shall not affect any administrative or judicial enforcement action pending on the effective date of such amendment nor the validity of any permit issued pursuant to AQCR 603.

[11/30/95; 20.2.32.8 NMAC - Rn, 20 NMAC 2.32.106 10/31/02]

20.2.32.9 DOCUMENTS: Documents cited in this Part may be viewed at the New Mexico Environment Department, Air Quality Bureau, Harold Runnels Building, 1190 St. Francis Drive, Santa Fe, NM 87505 [2048 Galisteo St., Santa Fe, NM 87505].

[11/30/95; 20.2.32.9 NMAC - Rn, 20 NMAC 2.32.108 10/31/02]

20.2.32.10 to 20.2.32.108 [RESERVED]

20.2.32.109 EMISSION LIMITATION -- NEW COAL BURNING EQUIPMENT: The owner or operator of new coal burning equipment having a power generating capacity in excess of 25 megawatts or a heat input of greater than 250 million British Thermal Units (BTU) per hour shall not permit, cause, suffer or allow nitrogen dioxide emissions to the atmosphere in excess of 0.45 pounds per million BTU of heat input.

[11/30/95; 20.2.32.109 NMAC - Rn, 20 NMAC 2.32.109 10/31/02]

20.2.32.110 EMISSION LIMITATIONS -- EXISTING COAL BURNING EQUIPMENT:

A. The owner or operator of Vintage A coal burning equipment having a power generating capacity in excess of 25 megawatts or a heat input of greater than 250 million BTU per hour shall not permit, cause, suffer or allow nitrogen dioxide emissions to the atmosphere in excess of 0.85 pounds per million BTU of heat input.

B. The owner or operator of Vintage B or Vintage C coal burning equipment having a power generating capacity in excess of 25 megawatts or a heat input of greater than 250 million BTU per hour shall not permit, cause, suffer or allow nitrogen dioxide emissions to the atmosphere in excess of 0.65 pounds per million BTU of heat input.

C. The owner or operator of Vintage D coal burning equipment having a power generating capacity in excess of 25 megawatts or a heat input of greater than 250 million BTU per hour shall not permit, cause, suffer or allow nitrogen dioxide emissions to the atmosphere in excess of 0.7 pounds per million BTU of heat input.

[11/30/95; 20.2.32.110 NMAC - Rn, 20 NMAC 2.32.110 10/31/02]

20.2.32.111 TOTAL EMISSION LIMITATION:

A. After April 30, 1992, the owner or operator of a facility with Vintage A, B, and C coal burning equipment shall not permit, cause, suffer or allow, on a station-wide basis, nitrogen dioxide emissions to the atmosphere in excess of 335,000 pounds per day, measured from midnight to midnight.

B. For periods when coal burning equipment identified in subsection A of 20.2.32 NMAC is not operated, the station-wide limitation shall be reduced by the following amounts:

(1) Vintage A or Vintage B coal burning equipment -- 1542 pounds per hour.

(2) Vintage C coal burning equipment -- 4667 pounds per hour.

[11/30/95; 20.2.32.111 NMAC - Rn, 20 NMAC 2.32.111 10/31/02]

20.2.32.112 COMPLIANCE DETERMINATION METHODS:

A. Unless otherwise required by 40 CFR Part 60, a facility subject to an emission limitation of 20.2.32.109 NMAC or 20.2.32.110 NMAC shall use any of the applicable reference methods specified by the US EPA at 40 CFR Part 60, Appendix A to determine compliance with the nitrogen dioxide emission limitation.

B. Compliance with the total emission limitation of 20.2.32.111 NMAC shall be based on measurements using a continuous emission monitoring system (CEMS) as required by 20.2.32.114 NMAC. Compliance determinations shall be performed using the following formula:

$$TE = \sum_{i=1}^{n} E_i \cdot H_i$$

where:

TE = total station-wide nitrogen dioxide emissions (lb NO_2/day);

E_i = daily average emission rate of each unit (lb NO_2/MBTU);

H_i = daily average heat input for each unit (MBTU);

n = the number of units of coal burning equipment operated during the day.

[11/30/95; 20.2.32.112 NMAC - Rn, 20 NMAC 2.32.112 10/31/02]

20.2.32.113 EMISSION TESTING: The owner or operator of any coal burning equipment subject to the emission limitations of subsections A or B of 20.2.32.110 NMAC shall conduct the reference method tests required under subsection A of 20.2.32.112 NMAC semi-annually.

[11/30/95; 20.2.32.113 NMAC - Rn, 20 NMAC 2.32.113 10/31/02]

20.2.32.114 EMISSION MONITORING:

A. The owner or operator of a facility subject to 20.2.32.111 NMAC shall install, calibrate, maintain and operate a CEMS, approved by the Department, which shall continuously measure and record nitrogen dioxide concentrations in the flue gases released into the atmosphere from each unit of coal burning equipment. Continuous emissions monitoring shall apply during all periods of operation of the coal burning equipment, including periods of startup, shutdown and malfunction, except for CEMS breakdowns, repair, calibration checks, and zero and span adjustment. All sampling points for monitoring nitrogen dioxide concentrations shall be approved in writing by the Department.

B. The CEMS required by this section shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15 minute period. One-hour averages shall be computed from four or more data points equally spaced over each one-hour period. Data recorded during periods of CEMS breakdown, repairs, calibration checks and zero and span adjustments shall not be included in the daily averages computed under this paragraph.

C. When CEMS emission data required under this section are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using other monitoring systems approved by the Department and the Administrator or one of the reference methods specified by the US EPA in 40 CFR Part 60, Appendix A, to provide emission data for a minimum of 18 hours in each day, midnight to midnight, in at least 22 out of 30 successive days.

D. The CEMS installed and used pursuant to this section shall be operated, installed and maintained in accordance with the performance specifications and other requirements set forth by the US EPA in 40 CFR Part 60, Appendix B, Performance Specifications 2 and 3. In the event of significant breakdown of the CEMS, the owner or operator shall demonstrate to the Department after the repair work that the CEMS continues to meet the applicable performance specifications. The Department may require the owner or operator to conduct a performance test of the equipment as specified in 40 CFR Part 60, Appendix B, but not more frequently than once per year unless the Department has reason to believe that the CEMS is not operating within the applicable performance specifications. An alternate means of verifying the performance of the CEMS may be used if approved by the Department and the Administrator. The Department may also perform independent audits on the CEMS.

E. Each CEMS required under this section shall be subject to the quality assurance requirements of 40 CFR Part 60, Appendix F. All reports required thereunder shall be submitted to the Department.

[11/30/95; 20.2.32.114 NMAC - Rn, 20 NMAC 2.32.114 10/31/02]

20.2.32.115 REPORTING REQUIREMENTS:

A. Persons subject to 20.2.32.113 NMAC shall submit reports to the Department for each semi-annual period, each report to be received by the Department within 30 days after the end of the period. The semi-annual report shall contain the following information:

(1) Date of test;

(2) Reference method used for the test;

(3) Coal burning equipment tested;

(4) Emissions data obtained by sample number, expressed in pounds nitrogen dioxide emitted per million BTU;

(5) Arithmetic average of sample data, expressed in pounds nitrogen dioxide emitted per million BTU;

(6) Any variances from the reference method.

B. Persons subject to 20.2.32.111 NMAC shall submit reports on the CEMS-based data to the Department for each calendar quarter, each report to be received by the Department within 45 days after the end of the quarterly period. The quarterly reports for each unit of coal burning equipment shall contain the following:

(1) Hourly and daily averages of the concentrations of nitrogen dioxide, expressed in pounds per million BTU, in the gases which are being emitted to the atmosphere, except for periods of instrument calibration and zero adjustments;

(2) Hourly and daily averages of the percent excess oxygen in the gases coming from the coal burning equipment;

(3) Hourly and daily average generation output of the coal burning equipment, expressed in megawatts;

(4) Daily average heat input into each unit of coal burning equipment;

(5) Total nitrogen dioxide discharged per day, on a station-wide basis, expressed in pounds per day, measured midnight to midnight;

(6) Nitrogen dioxide discharged per day per unit of coal burning equipment, measured from midnight to midnight, expressed as pounds per day and the number of hours used to calculate the limits in subsection B of 20.2.32.111 NMAC;

(7) The date and time identifying each period during which the CEMS was inoperative except for zero and span checks and the nature of the systems repairs or adjustments;

(8) Identification of the times when daily average emission data have been obtained by other monitoring systems or reference methods pursuant to subsection C of 20.2.32.114 NMAC;

(9) Identification of the days for which nitrogen dioxide or diluent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken;

(10) Identification of times when the nitrogen dioxide concentration as measured by the CEMS exceeded the full span of the CEMS;

(11) A report of emissions in excess of the limitation contained in 20.2.32.111 NMAC, the magnitude of the excess emissions and the time period(s) when the excess emissions occurred;

(12) Specific identification of each period of emissions in excess of the limitation contained in 20.2.32.111 NMAC that occurred during startup, shutdowns, and malfunctions of the affected facility, including the nature and causes of any malfunctions and the corrective action taken or preventative measures taken;

(13) Description of any modifications to the CEMS which could affect the ability of the continuous monitoring system to comply with the operating specifications of subsection D of 20.2.32.114 NMAC.

[11/30/95; 20.2.32.115 NMAC - Rn, 20 NMAC 2.32.115 10/31/02]

HISTORY OF 20.2.32 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the Commission of Public Records-State Records Center and Archives.

AQCR 603, Coal Burning Equipment - Nitrogen Dioxide, 04/04/72.

EIB/AQCR 603, Air Quality Control Regulation 603 - Coal Burning Equipment - Nitrogen Dioxide, 07/09/91.

History of Repealed Material: [RESERVED]

Other History:

EIB/AQCR 603, Air Quality Control Regulation 603 - Coal Burning Equipment - Nitrogen Dioxide, 07/09/91, was **renumbered** into first version of the New Mexico Administrative Code as 20 NMAC 2.32, Coal Burning Equipment - Nitrogen Dioxide, filed 10/30/95.

20 NMAC 2.32, Coal Burning Equipment - Nitrogen Dioxide, filed 10/30/95 was **renumbered, reformatted and replaced** by 20.2.32 NMAC, Coal Burning Equipment - Nitrogen Dioxide, effective 10/31/02.